

Official

15-12-03

Application No. 09/449,215

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 507 1. (Currently Amended) An image management system comprising:
- a picture and archival and communication system (PACS) server having a plurality of inputs and outputs, the inputs configured to receive image information signals and the outputs configured to provide image output signals, the PACS server configured to store information representative of a plurality of two dimensional image slices in one of DICOM3 or DEFF format, and the output signals representative of the stored two dimensional image slices;
- an imaging device having an output coupled to at least one of the inputs of the PACS server, and configured to provide an image signal; and
- a PACS workstation having an input coupled to at least one of the outputs of the PACS server, and configured to receive output signals from the PACS server representative of selected two dimensional image slices stored by the PACS server, the PACS workstation configured to construct three dimensional image renderings from the two dimensional image slices by at least one of multi-plane reconstruction (MPR), multi-plane volume reconstruction (MPVR), and maximum intensity pixel (MIP) projection and the PACS workstation having an output coupled to the PACS server and configured to provide the PACS server with a signal representative of the three dimensional rendering.
2. (Previously Amended) The image management system of claim 1 wherein the three dimensional rendering signal may be stored by the PACS server as a three dimensional rendering file.
3. (Previously Amended) The image management system of claim 2 wherein the three dimensional rendering file may be selectively communicated to a PACS workstation.

Atty. Dkt. No. 070191-0237 (15-IS-5290)

-3-

Application No. 09/449,215

4. Cancelled.

5. Cancelled.

550.7 6. (Original) The image management system of claim 1 wherein the imaging device is a medical imaging device.

7. (Previously Amended) The image management system of claim 2 wherein the PACS server includes a three dimensional rendering file storage.

8. Cancelled.

9. Cancelled.

10. Cancelled.

550.7 11. (Previously Amended) The image management system of claim 1 wherein the PACS workstation is configured to provide a three dimensional rendering by volume rendering.

12. (Previously Amended) The image management system of claim 1 wherein the PACS workstation is configured to provide a three dimensional rendering by surface rendering.

13. (Previously Amended) The image management system of claim 2 wherein the three dimensional rendering file includes the parameters needed to reconstruct the three dimensional image rendering.

Atty. Dkt. No. 070191-0237 (15-IS-5290)

Application No. 09/449,215

14. (Currently Amended) A method of producing a rendering of a three dimensional object from a plurality of two dimensional image information files, comprising:

receiving, by a picture archival and communication systems (PACS) server, a plurality of two dimensional image information files from an imaging device;

storing the plurality of two dimensional image information files on the PACS server in one of DICOM3 or DEFF format;

communicating selected two dimensional image information files to the PACS workstation;

receiving the selected two dimensional image information files by the PACS workstation;

constructing a three dimensional image information file based on the selected two dimensional image information files by at least one of multi-plane reconstruction (MPR), multi-plane volume reconstruction (MPVR), and maximum intensity pixel (MIP) projection; and

communicating the three dimensional image information file to the PACS server.

15. Cancelled.

16. Cancelled.

50 7 17. (Previously Amended) The method of claim 14 further comprising:
receiving a plurality of two dimensional image slices by the PACS workstation.

18. (Original) The method of claim 14 wherein the imaging device is a medical imaging device.

19. (Original) The method of claim 14 wherein the communicating step is carried out over an ethernet connection.

20. (Previously Amended) The method of claim 14 further comprising:
storing the three dimensional image file by the PACS server.

Atty. Dkt. No. 070191-0237 (15-IS-5290)

-5-

Application No. 09/449,215

21. (Previously Amended) The method of claim 20 further comprising:
communicating the three dimensional image file stored by the PACS server to the
PACS workstation.

22. (Original) The method of claim 14 wherein the three dimensional image
information file includes the parameters needed to reconstruct the three dimensional image
rendering.

23. (Currently Amended) A medical imaging system, comprising:
a medical scanner;
a picture archival and communication system (PACS) server coupled to the
medical scanner and configured to receive and store signals representative of two dimensional
image slices from the medical scanner;
a PACS workstation configured to receive selected signals representative of two
dimensional image slices and configured to construct a three dimensional rendering file from the
signals representative of the two dimensional image slices by at least one of multi-plane
reconstruction (MPR), multi-plane volume reconstruction (MPVR), and maximum intensity pixel
(MIP) projection.

wherein the three dimensional rendering file is communicated to and stored by the
PACS server.

24. Cancelled.

25. Cancelled.

Sub 26. (Original) The medical imaging system of claim 23 wherein the medical scanner
is an ultrasound imaging device.

27. (Original) The medical imaging system of claim 23 wherein the medical scanner
is a magnetic resonance imaging (MRI) device.

Atty. Dkt. No. 070191-0237 (15-IS-5290)

-6-

Application No. 09/449,215

28. (Original) The medical imaging system of claim 23 wherein the medical scanner is a computed tomography (CT) imaging device.

29. (Previously Amended) The medical imaging system of claim 23 wherein the PACS workstation includes a display.

30. (Previously Amended) The medical imaging system of claim 29 wherein the PACS workstation is configured to provide a [partial] three dimensional rendering representative of the three dimensional rendering file on the display.

31. (Previously Amended) The medical imaging system of claim 23 wherein the three dimensional rendering file may be selectively communicated to the PACS workstation.

32. (Original) The medical imaging system of claim 23 wherein the three dimensional rendering file includes the parameters needed to reconstruct the three dimensional image rendering.

Atty. Dkt. No. 070191-0237 (15-IS-5290)

-7-